AMENDMENTS TO THE CLAIMS:

Please cancel claims 1-15 and amend claims 16-18 and 20 as set forth in the following listing of claims. This listing of claims will replace all prior versions and listings of claims in the application:

1-15. (Canceled).

16. (Currently Amended) ~~The display unit of claim 14,~~A display unit configured for use in a sign display panel, the display unit comprising:

a memory;

a display output device;

an interface configured to communicate with a controller of the sign display; and

a central processing unit configured to:

receive, through the interface, one or more messages of a first type, the one or more messages of the first type communicating multiple frames of display data;

store a plurality of the received frames in the memory upon receipt;

receive, through the interface, a message of a second type containing a display instruction, the display instruction instructing the display unit to display one frame of the stored frames; and

process the one frame to update the display output device upon receipt of the display instruction;

wherein the first message type is a local message containing an address for a particular display unit; and

wherein the interface is configured to connect the display unit between a controller and an other display unit in series, and wherein the display unit is configured to, upon receipt of a local message:

check the address; and

if the display unit is not the particular unit:

decrement the address; and

send the local message, with the decremented address, to the other display unit.

17. (Currently Amended) The display unit of claim [[14]]16, wherein the second type of message is a global message.

18. (Currently Amended) The display unit of claim [[14]]16, wherein the display unit is further configured to identify the one frame from among the stored frames based on the display instruction.

19. (Previously presented) The display unit of claim 18, wherein the display unit is further configured to identify the one frame based on a frame identifier contained in the display instruction.

20. (Currently Amended) The display unit of claim [[14]]16, wherein the memory comprises a first-in-first-out memory and, upon receipt of the display instruction, the display unit is further configured to display the next frame stored in the memory.

21. (Previously presented) A method of rapidly refreshing a sign display panel, the sign display panel comprising: a controller; a plurality of display units, each display unit respectively comprising a display output device and a memory; and an interface configured to communicate messages from the controller to the display units, the method comprising:

the controller sending multiple frames of display data to the display units through the interface, the frames being contained in one or more messages of a first type;

the display units respectively receiving and storing a plurality of the frames in memory upon receipt;

the controller sending a display instruction to the display units through the interface, the display instruction instructing the display units to display one frame of the stored frames, the display instruction being contained in a message of a second type;

the display units respectively receiving the display instruction; and

the display units respectively processing the one frame to update the display output device upon receipt of the display instruction.

22. (Previously presented) The method of claim 21, wherein the first message type is a local message containing an address for a particular display unit.

23. (Previously presented) The method of claim 22, wherein the display units include a first display unit and a next display unit connected in series and wherein, upon receipt of a local message, the first display unit:

checks the address; and

if the first display unit is not the particular unit:

decrements the address; and

sends the local message, with the decremented address, to the next display unit.

24. (Previously presented) The method of claim 21, wherein the second type of message is a global message.

25. (Previously presented) The method of claim 21, wherein the display instruction identifies the one frame from among the stored frames.

26. (Previously presented) The method of claim 25, wherein each frame comprises a frame identifier, and the display instruction identifies the one frame by the frame identifier.

27. (Previously presented) The method of claim 21, wherein the memory comprises a first-in-first-out memory and, upon receipt of the display instruction, the display units display the next frame stored in the memory of the respective display unit.

28. (Previously presented) A system for rapidly refreshing a sign display panel, the system comprising:

a sign display panel comprising:

a controller;

a plurality of display units, each display unit respectively comprising a display output device and a memory; and

an interface configured to communicate messages from the controller to the display units;

wherein, the controller is configured to:

send multiple frames of display data to the display units through the interface, the frames being contained in one or more messages of a first type; and

send a display instruction to the display units through the interface, the display instruction instructing the display units to display one frame of the stored frames, the display instruction being contained in a message of a second type; and

each display unit is respectively configured to:

store a plurality of the frames in memory upon receipt;

receive the display instruction; and

process the one frame to update the display output device upon receipt of the display instruction.

29. (Previously presented) The system of claim 28, wherein the first message type is a local message containing an address for a particular display unit.

30. (Previously presented) The system of claim 29, wherein the display units include a first display unit and a next display unit connected in series and wherein the first display unit is configured to, upon receipt of a local message:

check the address; and

if the first display unit is not the particular unit:

decrement the address; and

send the local message, with the decremented address, to the next display unit.

31. (Previously presented) The system of claim 28, wherein the second type of message is a global message.

32. (Previously presented) The system of claim 28, wherein the display instruction identifies the one frame from among the stored frames.

33. (Previously presented) The system of claim 32, wherein each frame comprises a frame identifier, and the display instruction identifies the one frame by the frame identifier.

34. (Previously presented) The system of claim 28, wherein the memory comprises a first-in-first-out memory and, upon receipt of the display instruction, the display units display the next frame stored in the memory of the respective display unit.